II. REMARKS

Applicant has carefully reviewed this Application in light of the Office Action mailed May 22, 2003. Claims 1-21 are pending in this Application. Claims 1-21 were rejected. Applicant has amended Claims 1, 7, 15, and 19 to clarify various features of Applicant's invention.

Rejections under 35 U.S.C. § 112

Claim 19 was rejected by the Examiner under 35 U.S.C. § 112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Applicant has amended Claim 19 to overcome the rejection.

Rejections under 35 U.S.C. § 102(b)

Claims 1-21 were rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,168,158 issued to David J. McComas et al. ("McComas").

Claims 1, 7, and 15 have been amended to more clearly recite the function of the suppression grid. As recited, the suppression grid repels electronics and prevents them from reaching the detector. In other words, the electrons never even enter the area between the grid and the detector. As explained, in the Summary (page 4, 2d paragraph), it is sometimes desireable to limit the number of particles that reach the detector.

McComas (referred to herein as the '158 patent) teaches the use of a suppression grid to retain electrons that are between the grid and the detector. This is not the same as preventing electrons from passing through the grid on their way to the detector.

Claims 1-3 and 7 were rejected by the Examiner under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,294,790 issued to Scot R. Weinberger ("Weinberger"). Weinberger also teaches the use of a grid to retain electrons, rather than to keep them from reaching the detector.

It is true that Weinberger states that transmission efficiencies of grid 62 range from 30 - 70%. However, this is a function of the grid material. An appropriate analogy would be a screen door that prevents some light from being transmitted through the screen, due to the mesh material.

The passive effect of the suppression grid, due to its material, is not the same as using an applied voltage to *actively* prevent electrons from passing through the grid and thus prevent them from reaching the detector. It is the applied voltage that permit the grid to act as a variable "choke" on the number of electrons that reach the detector.

For the above reasons, neither the '158 patent nor Weinberger teach or suggest the suppression grid as claimed in Claims 1, 7, and 15 as amended. The remaining claims are dependent on the amended claims.

III. CONCLUSION

Applicant has made an earnest effort to place this case in condition for examination and allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

An extension of one (1) month is requested and a Notification of Extension of Time under 37 C.F.R. § 1.136 with the appropriate fee of $55.00 is attached herewith.

Applicant also encloses a Change of Correspondence Address herewith.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.2634.

Respectfully submitted,

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